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REMARKS

This paper is responsive to the Office Action dated October 21, 2005. Claims 1-69 were examined. The Office Action requested correction to paragraph [1007] to remove a URL and paragraphs [1001] and [1026] to identify a referenced patent application. Applicant has amended paragraph [1005], which included the URL, to remove the URL. Applicant has also amended paragraphs [1001] and [1024] to indicate the application numbers of referenced U.S. Patent Applications. Applicant did not find a URL in paragraph [1007], and did not find a reference to a patent application in paragraph [1024].

Rejections Under 35 U.S.C. §112

Claim 33 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 33 has been amended to depend from claim 32 instead of depending from itself.

Rejections Under 35 U.S.C. §102

Claims 1-53 and 61-69 are rejected under 35 U.S.C. §102(b) as being anticipated by Armstrong, "HotSpot: A new breed of virtual machine", Java World, <http://www.javaworld.com>, 1998 (hereinafter "Armstrong"). Applicant respectfully traverses all rejections. All of the rejections either are devoid of any disclosure of any of Applicant's limitations and rely solely on Applicant's own claim language, or improperly construe Applicant's claims.

All of the rejections rely on Armstrong's disclosure of the Hotspot virtual machine. However, Armstrong provides a summary of HotSpot, and does not provide a detailed disclosure. In fact, Armstrong specifically states in the first paragraph at page 4 that "[d]etails have not been disclosed." The Office's rejection of Applicant's claims relies on a high-level summary of HotSpot in the second paragraph at page 4 of Armstrong. The paragraph is as follows:

When bytecodes are first loaded, they are run through the interpreter. The profiler keeps a record of runtimes for each method. When a method is found to be taking a lot of

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time, HotSpot compiles and optimizes it. Every future call to that method uses the native machine instructions produced by the compiler.

None of the limitations of the claims are disclosed are suggested by Armstrong. All of the rejections are insufficiently supported with a general reference to the high-level description of HotSpot at pages 3 – 4 and specifically to the above paragraph, and Figure 3. The rejections either quote Applicant's claims and cite to the above paragraph, or modify sentences from the above paragraph with language from Applicant's claims. The flaw prevalent throughout the Office Action is that disclosure from Armstrong alone, without buttressing from Applicant's own claim language, does not disclose or suggest any of Applicant's claims. Applicant traverses all of the rejections, but does not address all of the claims individually since the rejections are mere reproductions of Applicant's claims and other rejections. For instance, the rejections of claims 34 – 39, 41 – 45, 53, and 61 – 66 merely refer to other rejections. Applicant respectfully requests that the Office provide some clarity as to rationale for the rejections beyond reproductions of Applicant's claims to provide some guidance for Applicant to respond to the rejections. For example, rejection of claims 23 – 29, 32 – 33, and 46 – 49 merely refer to the Figure on page 3. The figure on page 3 depicts a program source feeding into a java compiler, which generates byte codes. The bytes codes are fed into the HotSpot virtual machine. The HotSpot virtual machine includes a dynamic compiler, a profiler, a virtual machine, a native machine code, and a control. To illustrate, there is no indication by the Office as to what aspect of the Figure discloses a binary translator (as recited in claim 24), a binary rewriter (as recited in claim 25), a JIT compiler (as recited in claim 27), aggregating contributions of plural instances of execution events (as recited in claim 28), or backtracking from a point in the code that coincides with delayed detection of the execution event (as recited in claim 29).

With regard to independent claims, the rationale for rejecting claim 1 suffers from the flaws outlined above and improper construction. Rationale for rejecting independent claims 34, 61, and 66 simply refer to claim 1. Claim 1 recites "identifying at least one operation in first executable instance of code...and preparing a second executable instance of the code." Armstrong discloses compiling some methods from bytecodes into native machine code, while maintaining other methods in byte code. The Office construes a bytecode method as a first


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executable instance of code and a compiled native machine code method as a second executable instance of the code. However, the Office also attempts to construe the method as at least one identified operation. Such a construction disregards the language of Applicant's claims. The Office is construing the method of Armstrong as both an operation in a first executable instance of code, and the first executable instance of code.

Furthermore, Armstrong never discloses or suggests associating a corresponding execution characteristic with a corresponding identified one of the operations responsive to detection of an execution event, as recited in claim 1. The Office relies on Armstrong's disclosure of "[t]he profiler keeps a record of runtimes for each method." As already stated, Armstrong does not disclose or suggest an identified operation, and does not disclose or suggest associating an identified operation with an execution characteristic in response to anything.

The arguments above present only some of the inadequacies of the Office Action. As previously stated, Armstrong does not disclose or suggest any of Applicant's claims. Hence, all of Applicant's independent and dependent claims are allowable over the art of record.

In summary, claims 1 – 53 and 61 – 69 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

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 Steven R. Gilliam	<u>22-Feb-2005</u> Date

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Respectfully submitted,



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